REMARKS

The Non-Final Office Action mailed February 4, 2009 has been received and carefully noted. Claims 1-27 are currently pending in the subject application and are presently under consideration.

Claims 1, 11, 18, and 23 have been amended and claims 5, 15, 25, and 26 have been canceled herein. Support for the amendments may be found in at least paragraphs 0022 and 0025 of the Specification and the originally filed claims. A listing of claims can be found on pages 2-7 of this Response.

Favorable reconsideration of the pending claims is respectfully requested in view of the amendments and the following comments.

I. Rejection of Claims Under 35 U.S.C. §103(a)

Claims 1-5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Andrews *et al.* (U.S. 2005/0122339) ("Andrews") in view of Rosenbluth *et al.* (U.S. 2003/0046488) ("Rosenbluth"). The Applicant respectfully requests withdrawal of this rejection for at least the following reason. Andrews and Rosenbluth do not teach or suggest all the limitations of the claims.

The subject claims are generally directed to rendering graphics using a render-cache with a multi-threaded, multi-core graphics processor. In particular, amended independent claim 1 recites "the render-cache controller to **block a thread from dispatching to the graphics engine** if the thread specifies a cache-line address of the render-cache containing a pixel in flight" (emphasis added). The Examiner concedes that Andrews does not teach dispatching threads to a graphics engine as related to pixel data, and therefore offers Rosenbluth (*See* Office Action, pg. 3). However, the Applicant respectfully notes that Rosenbluth does not teach or suggest the amended limitations of independent claim 1.

Rosenbluth is generally directed to a lookup mechanism for packet processing. While the Examiner notes that Rosenbluth discloses threads executed in strict order (*See* Office Action, pg. 3), the **execution** of threads in order is not equivalent to the **dispatching** of threads. Threads may be **executed** in an order not withstanding the order in which they are **dispatched**. Amended claim 1 recites that a thread is **blocked** from being **dispatched** to the graphics engine if the thread specifies a cache-line address of the render-cache containing a pixel in flight. If claim 1

thus amended is to be rejected, the Applicant respectfully requests that the Examiner indicate the specific part of the cited reference that relates to such thread **dispatching**, rather than thread execution, and the specific part of the cited reference that discloses **blocking** a thread from being dispatched to the graphics engine.

As to independent claim 11, this claim ahs been amended to recite "the render-cache controller is to **block the thread dispatcher from dispatching threads** generated by raster logic if threads include cache-line addresses of the render-cache containing pixel data in flight" (emphasis added). Amended independent claim 18 recites "**blocking a thread corresponding to the previously allocated pixel data from dispatching to a graphics engine** if the previously allocated pixel data is in flight" (emphasis added). Amended independent claim 23 recites "the graphics processor further comprises raster logic to generate threads, each thread including at least one cache-line address indicating the location of the pixel data in the render-cache, and a thread dispatcher to **dispatch each thread to the graphics engine only** when the render-cache controller indicates a cache hit during a lookup operation, and the pixel data stored at the at least one cache-line address is not in-flight" (emphasis added). If these claims thus amended are also to be rejected by the Examiner, the Applicant respectfully requests that the Examiner indicate the specific parts of the reference that disclose these aspects as well.

The Applicant does not discern any part of the other cited references that cures the aforementioned deficiencies of Andrews and Rosenbluth regarding the aspects of the amended independent claims. Any dependent claims not mentioned above are submitted as not being obvious for at least the same reasons given above in support of their base claims.

It should be noted that not all of the assertions made in the Office Action, particularly those with respect to the dependent claims, have been addressed here, in the interest of conciseness. The Applicants reserve the right to challenge any of the assertions made in the Office Action by the Examiner, with respect to the relied upon art references and how they would relate to the Applicant's claim language, including the right to swear behind or otherwise remove an improper art reference.

In view of the above, withdrawal of these rejections is respectfully requested.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes a telephone conference would be useful in moving the case forward, he is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,
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I hereby certify that this paper is being transmitted online via EFS Web to the Patent and Trademark Office, Commissioner for Patents, Post Office Box 1450, Alexandria, Virginia 22313-1450, on 5/4, 2009.

Susan M. Manriquez 5/4/09